## District Administrators' Governing Styles in the Enactment of Data Use Practices

#### Tine Sophie Prøitz, Sølvi Mausethagen & Guri Skedsmo

To cite this article: Tine Sophie Prøitz, Sølvi Mausethagen & Guri Skedsmo (2019): District administrators' governing styles in the enactment of data-use practices, International Journal of Leadership in Education

To link to this article: https://doi.org/10.1080/13603124.2018.1562097

#### Abstract

This study focus on how administrators in districts approach data and data use in education differently. Based on data material from local policy documents, interviews with district administrators and observations from meetings with district administrators, school leaders and teachers, we reveal how different views on learning outcomes manifest in language use and choice of influence attempts, calling for greater consideration and awareness of the role of local authority in education. Our analysis shows how policy goals, as defined in key policy documents, are transformed and adapted into varied local governing styles – sometimes shifting the focus of primary goals in another direction, and at other times enhancing and extending the goals.

This article addresses how administrators in districts with different quality assessment systems use distinct approaches to data and data use in education. Especially, the analysis emphasises how these administrators attempt to influence 'data-use practices'. By 'data use practices', we mean what happens when individuals use test scores, grades and other forms of assessment in their work (Coburn & Turner, 2011; Spillane, 2012). The use of data for governance purposes represents new ways for national authorities to coordinate activities across administrative levels to improve educational quality (Altrichter & Merki, 2010;

Skedsmo, 2009). A central component in this line of thinking is the role of local authorities as drivers and motivators for the use of data in schools. Examining how district administrators interpret local policy goals, as defined in key policy documents, and then act on these in meetings with school leaders can illuminate their role as interpreters and brokers of predefined goals. This perspective can help explain the varied local approaches to policy goals and data use in schools and districts. Investigations on various approaches at the district level can also allow for a nuanced understanding of institutional processes in response to the dominant perspective in the data-use literature, which often addresses implementation, effectiveness and how data-use practices can ideally be designed and performed (e.g. Kelly & Downey, 2012; Wayman, Jimerson, & Cho, 2012).

Some of the most important roles played by local authorities/districts in systemic education reform relevant for this study are as follows: (a) providing instructional leadership, (b) reorienting the organisation, (c) establishing policy coherence and (d) maintaining an equity focus (Rorrer, Skrla, & Scheurich, 2008). The present study focusses especially on the first two roles. Moreover, the literature review by Rorrer et al. (2008) provides an expanded discussion of what defines districts' instructional leadership, drawing conclusions that are highly relevant to this study by illustrating the multilevel complexity and wide-ranging role of administrators, as follows:

From research on districts to date, then, we can conclude that district instructional leadership builds capacity by coordinating and aligning [the] work of others through communication, planning, and collaboration. . . ; monitoring goals, instruction, and efforts to improve instruction, including increasing data accessibility, availability, and transparency and accountability. . . ; and acquiring and targeting support for instruction, including securing human and fiscal resources. (pp. 314–318)

However, there has been less focus in the literature on how administrators interpret goals and how this influences their instructional work.

To address the identified gap in the literature, we examine the facilitation of developmental processes in schools using student performance data and student survey data conduct an in-depth study of everyday events in district administrators' work. One global policy trend in education is that of improving teaching and learning by assigning responsibility for educational change and improving students' learning outcomes at the municipal/district level (Farrell & Coburn, 2017). Still, researchers have overlooked the importance of the municipal/district level in systemic education reform, although it is defined by a 'web of interrelated and interdependent roles, responsibilities and relationships' (Rorrer et al., 2008, p. 208). This also contrasts with the abundance of studies on educational leadership; there seems to be a paucity of studies on midrange educational leadership (Avidov-Ungar & Reingold, 2016). Furthermore, past research on data use has most often been presented in an Anglo-American context, although the investigative modes in the fields of data use in education vary depending on the geographic location and educational systems (Prøitz, Mausethagen, & Skedsmo, 2017).

In Norway, the municipal/district level has been given enhanced responsibility for student outcomes, as well as for initiating and following up on school development processes. Since the 2000s, Norway has seen an increased focus on student performance, especially in terms of national test data. National tests were trialled for the first time in 2004, and the National Quality Assessment System was introduced in 2005. Since 2006, all municipalities have been required to have a local quality assessment system. The Knowledge Promotion reform of 2006, as well as the policy documents that introduced it, reinforced deregulation and emphasised the responsibilities of local education authorities and school leadership, while at the same time, reiterating the importance of holding key actors in the system accountable (Møller & Skedsmo, 2013). This national testing has provided local authorities, school leaders and teachers with more available information regarding students' achievements in terms of their competences. However, there are differences among local authorities relating to how, and to what extent, the results and their use are integrated into local quality assessment systems and linked to other local governing tools (Aasen, Møller, Rye, Prøitz, & Hertzberg, 2012; Skedsmo & Møller, 2016). The expectations of the district administrators – that they will enhance learning outcomes in a more decentralised system – may have created a new space that enables administrators to develop different governing styles.

The data used in this article are part of a larger longitudinal research project on data use in Norwegian schools and municipalities. In this study, we draw on qualitative data from two of the municipalities included in the project. The municipalities differ in terms of geographic location, size and the quality assessment system, and they were investigated using qualitative methods over a period of three years. Three elements have been considered in the analysis of how district administrators attempt to influence data use in schools, as follows: (a) administrators' interpretations of policy goals in local key policy documents; (b) administrators' meaning making of the goals, data and data use in education; and (c) how goals are formulated and enacted by the administrators in their interactions with school leaders in data-use meetings.

We use the concepts of 'macro' and 'micro' (Daly, Finnigan, Jordan, Moolenaar, & Che, 2012; Henig, 2012) to investigate the potential relationships between the system levels involved (district administrator level and school leader level) in terms of policy influence and the influence attempts exerted by administrators. From this perspective, education is understood as inherently political and an arena for large-scale macro-political forces to put pressure on districts to act on societal demands (Daly et al., 2012). Based on this understanding, the macro-level consists of various policymakers and stakeholder groups that define the context and influence the decision-making processes of individuals in districts and schools. It follows that there are macro-pressures on individual actors, 'who (at the micro level) through their own lens of values, beliefs, and experiences prioritize action, make judgments, and leverage resources (material, skills, and social) to produce outcomes' (Daly et al., 2012, p. 148). A central aspect in this understanding that is relevant for this study is that of influence exerted among levels of the education system. Especially, we are concerned with the influence that the macro-forces have on individual administrators and how those administrators translate defined policy goals into their influencing attempts as directed at school leaders at the micro-level. The macro-level is defined by the formal organisation and its message, which is codified and communicated through the strategic plans and policy documents at the district/municipal level. The micro-level is defined by the values, ideas, beliefs, prioritisation of actions, judgments and resources of an individual administrator at the district level that leads to his or her various attempts at achieving interpersonal influence. By examining the relationship between macro-policy forces of the formal system and the microactivities of the 'lived organisation' (Spillane et al., 2009) of school administrators, and by focussing on influence, we can generate insights into variations in school administrators' understandings and actions concerning data use as district-level actors.

The following questions guided the study:

- How do district administrators give meaning to predefined policy goals in local policy documents?
- 2) What characterises their choice of actions directed toward school leaders' data use?
- 3) What are the implications for the identified adaptations and enactments made by district administrators when compared with local policy ideals and plans for data use in education?

Below, we outline some key studies on data use at the district level and then go on to describe our analytical perspective and the data and methods used in this study. Thereafter, we present the study findings before concluding with a discussion of variations in goals and administrators' governing styles across different districts and administrative levels.

#### Data Use at the District Level

Since the early 2000s, there has been a growing interest in studying data-use practices in schools and school districts (e.g. Coburn & Turner, 2011; Jennings, 2012; Kelly & Downey, 2012; Little, 2012; Racherbäumer, Funke, van Ackeren, & Clausen, 2013; Schildkamp, Karbautzki, & Vanhoof, 2014; Spillane, 2012). One general finding in the literature on data use is that the ways in which data are employed depend on factors related to organisational routines, such as access to data, time, resources, leadership and norms of interaction (Coburn & Turner, 2011; Farrell & Coburn, 2017). Empirically, the relationships among various actors and education system levels in educational change, as well as developmental processes, are rather complex. Studies have shown that standardised test results can be considered useful by local authorities/districts for monitoring purposes, although school leaders and teachers often experience challenges in using these data (Aasen et al., 2012; Datnow, Park, & Kennedy-Lewis, 2012; Park, Daly, & Guerra, 2012). Therefore, initiatives taken at higher administrative levels do not necessarily lead to changes in existing practices in schools and classrooms.

Studies on the work of local authorities or at the district level regarding data use typically highlight variations in schools' approaches to data use. Examples include whether there is a policy on data use and if it is an activity that is prioritised, supported or even coerced by local school authorities (Kerr, Marsh, Ikemoto, Darilek, & Barney, 2006; Miller, 2010). These studies are also concerned with how different local and organisational cultures frame, foster or hinder data use in schools. For example, some studies have focussed on how a high degree of coercion linked to control seems to weaken the development of productive organisational cultures for data use (Coburn & Turner, 2011; Wayman et al., 2012; Young, 2006; Young & Kim, 2010). Furthermore, strong leadership and the coherency of goals are of great importance for enhancing a district's use of data (Parke, 2012). The 'coherency of goals' refers to having a focussed and coordinated set of goals; however, such coherency is also seen as especially challenging to achieve because district administrators often work in small organisational units and cooperate with units in other districts to varying degrees. Such organisational aspects can create a misalignment across administrative levels. Professional ties can also influence the coherency of goals, as administrators could consider the initiatives for which they are responsible as being beyond their realm of expertise, for example, in relation to school leaders (Parke, 2012).

A substantial body of literature has already demonstrated how data-use practices, in combination with leaders who emphasise accountability and students' learning outcomes, contribute to narrowing the scope of educational goals (e.g. Hallett, 2010; Valli & Buese, 2007). However, since such research is mainly conducted at the school level, we know less about the processes influencing and shaping what is going on at the district level and between the district and school levels. Characteristic of the overall literature on data use is its emphasis on the organisation of data-use practices and how this should best be done to develop and secure these practices (Prøitz et al., 2017). In contrast, little emphasis has been placed on how local policies are enacted in interactive processes between administrators and local policy documents, on the one hand, and administrators and schools on the other.

#### **Analytical Framework**

In this article, analytical perspectives on learning outcomes are combined with the concepts of attempts at interpersonal influence and actors' primary and secondary goals. Given that local policy goals in Norway are very often framed as outcomes in accordance with the national curriculum and national regulations expressing what students should know and master, analytical perspectives on learning outcomes have been chosen as an overarching frame for the intended work and actions defined both at the macro and micro levels. It is not clear how learning outcomes are to be understood, as they often communicate the results of educational efforts while also setting out the premises for the resulting learning activities – the processes. In short, distinct traditions underpin different understandings and uses of learning outcomes, leading to debate over whether they are mainly limited to expressions of performance or if they include broader educational process goals (Prøitz, 2010, 2014).

The lack of conceptual clarity has been identified as a problem by some practitioners (cf. Kennedy, 2006), while others have warned against definitive and narrow learning outcomes, as these may limit the interpretive space needed in education practice (Havnes & Prøitz, 2016; Lundgren, 2006). Studies on learning outcomes have shown that there is one established and dominant understanding of learning outcomes that is usually employed in policy settings and policy documents (Hargreaves & Moore, 2000; Hopmann, 2008; Lassnigg, 2012; Lawn, 2011; Ozga, 2009; Prøitz, 2014). This involves understanding learning outcomes as the end product of education, which Kennedy et al. (2007) define as 'a written statement of what the successful learner is expected to be able to know, understand and or be able to demonstrate after a completion of a process of learning' (p. 5). Parallel to this, there is ongoing scholarly debate contesting this dominant understanding, suggesting other definitions and perceptions, often with a certain emphasis on the more process-oriented aspects of working with learning outcomes (Allan, 1996; Eisner, 2005; Hargreaves & Moore, 2000; Havnes & Prøitz, 2016; James & Brown, 2005; Prøitz, 2010). These studies have shown how different understandings of learning outcomes relate to different conceptualisations of learning and what is valued and validated as learning in education with consequences for what are considered relevant assessment approaches. For example, Prøitz

(2014) focussed on positions related to more behaviourist, versus more constructivist, approaches to learning.

Diverse meanings and potentials have been ascribed to the concept of learning outcomes, which is seen as encompassing various purposes and called on to serve the agendas of both policy and pedagogy (Prøitz, 2014). A characteristic demarcation line between these perspectives can be found in variations of purposes for working with learning outcomes, a more 'managerial-oriented' approach that focusses on the results of education for quality assurance, accountability and control purposes, and a more 'pedagogical-oriented' approach that focusses on education planning, assessment, learning and processes. These two perspectives also differ in their approaches to learning: Whereas the former often emphasises a more closed and narrow understanding of learning outcomes, the latter stresses a more open, broader understanding (Prøitz, 2014). With this frame of reference, the present study analyses potential variations in approaches to learning outcomes at the district policy level through the meaning making of district administrators and in their dialogues with school leaders on data use. Further, as the study aims for a closer analysis of the work of district administrators in the intersection between the district and school levels, concepts and perspectives that enable the study of administrators' motivations and ambitions to influence actions through interaction are central. This approach has been selected to enable a study that both includes the multiplicity of administrators' roles and responsibilities (Rorrer et al., 2008) and considers the relational aspects of administrators' work, such as variations in the use of support and coercion, which are currently missing in the field of data-use research (Kerr et al., 2006; Miller, 2010). It also considers whether a varied focus on accountability and student learning outcomes contributes to narrowing the scope of educational goals, as shown in school leadership research (e.g. Hallett, 2010; Valli & Buese, 2007). We also seek to determine the degree to which organisational factors can create misalignments across

administrative levels (Parke, 2012). Thus, in this study, perspectives on attempts at interpersonal influence (Dillard, Segrin, & Harden, 1989; Schrader & Dillard, 1998) are used for an in-depth analysis of how administrators interpret, translate and adapt to macro-forces of accountability, for example, as defined in key policy documents and regulations. We also analyse learning outcomes and data use in their micro-decisions and choices on interaction with school leaders. The theory of influence takes several distinct functions of goals in communication as its point of departure, for instance, that goals are a driving force in planning, and thus, they make action possible. As school administrators are expected to exert influence over school leaders and school development based on defined goals, the administrators' interpretations of policy goals and their attempts to influence their school leaders based on defined goals are a focal point of this study's analysis.

Goals 'provide culturally viable explanations for the behaviour[s] of actors and observers' (Schrader & Dillard, 1998, p. 277). One example of this is how people typically relate accounts of their achievements by directly or indirectly referring to their goals. There are varying types of goals, and they often have to do with the situation in which the goals were defined and used in the first place. Goals also vary in importance. If a goal is viewed as important enough to motivate an action, it will pass meaning to the interaction, and thus, reflect its function as a type of goal (Schrader & Dillard, 1998). Therefore, goals can be divided into the primary and secondary categories. A primary goal motivates planning and action, as it explains what the action is about and what the actor is trying to achieve. However, as Schrader and Dillard (1998) clarified, the pursuit and adoption of primary goals often leads to the consideration of secondary goals. Secondary goals stand in contrast to primary goals, as they typically delimit the options to act. Secondary goals include those related to self-concepts and morals, personal standards (identity goals), goals concerned with social appropriateness and concerns (interaction goals) and goals that focus on increasing and maintaining valued relationships (relational resource goals; Dillard et al., 1989; Feng & Wilson, 2004; Schrader & Dillard, 1998). The relationship between primary and secondary goals primarily concerns priorities and interpersonal influence, thereby making the 'influence goal' the primary one. However, such goals are not necessarily stable, and primary and secondary goals should first and foremost be considered discursive practices. With this in mind, studying how different actors negotiate goals could open up avenues for investigating how both primary and secondary goals change over time, as well as how the ability to 'define reality' is affected by various contextual factors, including power issues (Feng & Wilson, 2004).

#### **Methods and Materials**

The data used in this article are part of a larger, ongoing research project on the use of data in Norwegian districts and schools. In this study, data from two districts and two of their schools are presented and analysed. These districts and schools were selected based on their differences in terms of geographical location (rural and urban), size (small and large) and type of quality assessment system (under development and highly sophisticated). The selection of these cases can be characterised as purposeful, and to a certain extent, of maximum variation, where the purpose is 'documenting unique or diverse variations that have emerged in adapting to different conditions, and to identify important common patterns that cut across variations' (Palinkas et al., 2015, p. 534). As the selected districts represent well-known characteristics of districts in Norway, they can be regarded as providing relevant examples of practices in the Norwegian context. Moreover, it could be argued that there is little overall difference, since schools in Norway use the same curriculum, laws and regulations, and all schools are obliged to participate in national tests and evaluations. Further, all Norwegian teacher education is guided by national frameworks, and professional development has become increasingly centralised. Although this study's results cannot be

generalised to a larger population of districts, administrators or school leaders, the study does offer analytical generalisations by providing transparency and theoretical interpretations involving a reasoned judgement about the extent to which its results can be used as a guide for predicting what might happen in similar contexts (Kvale & Brinkmann, 2009).

In Norway, local municipal authorities govern all primary and secondary schools. Although Norwegian education is state governed, the country's 426 (as of 01/01/17) municipalities have always been characterised by a certain degree of autonomy: They are local authorities with regulatory and decision-making powers, elected political bodies and employed administration, and they operate under their own budgets and local rules (Aasen et al., 2012; Tranvik & Selle, 2006). Although Norwegian districts have a long tradition of local autonomy, they are obliged to provide education in accordance with the Norwegian Education Act and the regulations that follow from it, as well as the national curriculum and national regulations for assessment; moreover, they must report the results for monitoring purposes. This reflects the national governance of the publicly funded Norwegian education system, which aims to ensure the continuation of long-standing values and traditions of inclusion and students' rights to equal education. However, recent studies have shown the difficulty of upholding these values across the country; moreover, local variations persist, in terms of structural and organisational elements - as well as schools' assessment results despite measures taken to address them (Aasen et al., 2012; Steffensen, Ekren, Zachrisen, & Kirkebøen, 2017). This study investigates these local variations through the exemplary cases of two districts that are similar in terms of being subject to the same national regulations, such as the national curriculum and guidelines, National Education Act and supplementary regulations, but which also differ along several dimensions in terms of their numbers of students and schools, geographic location, structure and organisation and results.

To investigate data use as it occurs between levels of policy and practice, and at the district and school levels, this study draws on various sets of data, such as documents, interview transcripts and field notes from observations collected over a period of three years. To enable a study of the facilitation of data use in developmental processes that goes beyond organisational structures and routines, the choice was made to emphasise data that allow for 'zooming in' on an analysis of meaning making and interaction (Horn & Little, 2010; Little, 2012). This leads to a certain focus on language, the choice of wording and text, both in formal writing and as expressed in interviews, conversations in meetings (micro-level) and in combination with an analysis of policy documents (macro-level). In the following, the three types of data used in this study are described.

#### **Documentary Material**

The analysis draws on policy documents produced by the two municipal/district administrations, data from interviews with two district administrators and observation data from data-use meetings between district administrators and school leaders. The key district policy documents include municipal webpages, annual reports, action plans, annual budgets, strategic plans and municipal plans and governing cycles. From an initial total corpus of about 200 pages of documents, roughly 100 proved to be relevant for in-depth analysis. The annual municipal reports are the main sources of the material presented. The purpose of the document analysis was limited to identifying the priorities and goals set by the municipalities and those administrators were expected to pursue in their work with school development; thus, the work here does not aim to be a full policy analysis. The analyses of these overarching macro-concepts of district learning outcomes were conducted via a process of first skimming the documents to identify relevant content and then taking the next step of engaging in a closer, in-depth reading, interpretation and analysis of the text (Bowen, 2009). The focus of this process was on understanding how learning outcomes are described in district policy documents that aim to drive and motivate interaction (Feng & Wilson, 2004; Schrader & Dillard, 1998). The documents used are not cited; this choice was made to avoid compromising the anonymity of the municipalities. Instead, they have been given the pseudonyms District A and District B.

#### **Interview Materials**

The local administrators were interviewed in 2015/2016<sup>1</sup>. All the interviews were recorded and transcribed verbatim. A semi-structured interview guide was used that was organised thematically around questions concerning the administrators' professional backgrounds and in-service experiences; what they consider their most important work; descriptions of characteristics of data use in the district administration, as seen in relation to school development; the use of data in dialogues with school leaders; and the administrators' views on and practices of data use.

Both administrators recently assumed their positions and had school leadership backgrounds. They were responsible for 11 (District B) and 21 (District A) primary and secondary schools. While one of the administrators reports directly to the chief district executive, the other reports to the chief district education officer. These differences reflect the sizes of the municipalities and their available resources in terms of staff and support systems. Despite this variation, their work is largely similar concerning their responsibilities connected to district policy, regulations, budgets and the overall administrative system. The analysis of the interviews provides insight into the administrators' meaning making and directs attention to modifications of the macro-policies that may shape the administrators' ideas on how best to influence school leaders to work with data.

<sup>&</sup>lt;sup>1</sup> The study was registered by the Norwegian Data Protection Official for Research, and all the district administrators and school leaders gave their written consent to participate in the study.

#### **Observation Materials**

The data-use meetings initiated by the district administrators with school leaders were observed in 2015/2016. The meetings can be seen as strategic arenas for examining data-use practices: Not only do they entail interaction, but they also have become a means for organising these interactions (Horn & Little, 2010; Little, 2012). An observation protocol developed and used in earlier data-use studies was applied (Spillane, 2012). The protocol covers a range of potential elements in the meetings, from descriptive data on when the meeting was held and who attended, what happened in the room and who led the meeting, to what the goal of the meeting was, special assignments, why assignments were made, who talked more/less, the participants' roles, how they supported their positions and how the meeting ended. The inclusion of two observers enabled discussion and calibration of the observations. The meetings were often referred to as 'result meetings', 'result dialogue meetings' or 'development meetings'. Such meetings occurred regularly and were part of the school year's district governing cycle. The frequency of these meetings varied between the administrators, from once a month to once or twice per semester. The meetings covered various themes, but they were largely related to the publication of national assessments and surveys, such as the results of the national tests, which are released in late autumn. The types of meetings that were observed for this study placed a certain focus on the results of the Norwegian national tests. However, the data discussed were also considered, for example, in relation to the national exams.

#### **Three Steps of Analysis**

The analysis employed the following three steps: First, key local policy documents were analysed with a focus on defining policy goals (primary goals). Second, transcripts of the interviews with the district administrators were analysed for identifying their interpretations of the policy goals in relation to their thoughts on influence attempts and the planned interactions in data-use practices. Third, how the administrators enacted their educational goals in their meetings with school leaders was analysed, with a specific analytic focus on relevant episodes (Schrader & Dillard, 1998).

#### Findings

The district administrations' policy goals, as defined in key policy documents and as adapted and enacted by their district administrators in interviews and meetings, are presented in this section. We have identified approaches to learning outcomes in the micro-meaningmaking efforts of the two district administrators and further identified varied approaches and influence attempts in the enactment of data use in meetings with school leaders.

The policy goals described in the documents are highlighted, along with the influence attempts by the administrators as described in the interviews and enacted in the meetings. In the table 1 below, the main goal structures and influence attempts, as identified through the material from the three data sources, are summarised. The table presents extracts from the material, including quotations from the policy documents, snippets from the interviews and observed influence attempts described in the field notes. Thereafter, a closer analysis of the data collected in the two districts, with a specific emphasis on the enactment of data-use practices as they took place in the data-use meetings, is presented.

	District A	District B
Documents Policy goals (macro-learning outcomes)	-'All students shall learn more – students' basic skills and knowledge in main subjects are to be strengthened. -'More students shall complete and pass upper secondary school'. -'All students shall have a good learning environment – characterized by peace and order'.	<ul> <li>-'Students' competence in basic skills will show through improvement in learning and motivation.</li> <li>-'All students see themselves as appreciated and included in a way tha emphasizes learning, mastery and motivation and they experience teachers that lead the learning activities through order, respect and engagement'.</li> <li>-Through systematic assessment, we create a foundation for learning, growth and development for the individual student'.</li> </ul>
Interpretation, translation and adaptation of policy goals (micro-learning outcomes) Thoughts on influence attempts	<ul> <li>Student learning outcomes and analysis of student performance data, for decision-making on measures and evaluation of effects</li> <li>Direct, concrete and focused on outcomes</li> <li>Meetings at the individual school with school leaders and selected teachers</li> <li>Asking questions, ordering information, correcting, praise</li> </ul>	<ul> <li>Student learning outcomes as a general and overarching focal point for school development and dialogue (broad perspective)</li> <li>School development in a safe, sup portive environment</li> <li>Frequent meetings with school lead ders and individual school meetings with school leaders</li> <li>Dialogue about learning outcomes (broad perspective)</li> </ul>
Meetings Influence attempts	<ul> <li>Check out and make inquiries into what leaders and teachers do to act on results and improve outcomes</li> <li>Direct, concrete and confrontational discussions about teaching and learning</li> <li>Make inquiries into what they do and why, and the effects of the selected measures</li> </ul>	<ul> <li>Present results</li> <li>Dialogue about learning outcomes</li> <li>Facilitate areas for common interpretation, analysis and discussion of data</li> </ul>

Table 1. Overview of policy goals (learning outcomes) and influence attempts exemplified by extracts from documents, transcripts of interviews and field notes from meetings.

## District A: Student Learning Outcomes, Data Analysis and Systematic Follow Up

The document data illustrate District A's strong focus not only on increased learning for all students in selected subjects, basic skills and social development, but also its strong emphasis on the continuation and further development of good and safe learning environments. The documents highlight several strategies for prioritising attention paid to student learning outcomes in subjects and basic skills, the use of standardised materials and tools and having qualified leaders and teachers. Especially, the importance of systematic documentation, having analytical competence in schools and using results to provide highquality follow up on individual students' learning is generally underscored. The annual municipal report describes what are considered to be ambitious goals for student learning and development. Overall, 'the assignment' of the schools is defined as providing access to subject learning and social learning in a safe and inspiring environment. Schools are meant to stimulate students' motivation and contribute to the learning of all students, regardless of their background (economic, ethnic, gender or functionality level). The points that schools are expected to contribute to social mobility and maintain high expectations for the development and achievement of learning outcomes for all students are underscored. Further, it is emphasised that both students with learning challenges and those identified as gifted shall benefit from extra instruction. Macro-learning outcomes are explicitly set out in the following: (a) all students shall learn more – students' basic skills and knowledge in main subjects are to be strengthened; (b) more students shall complete and pass upper secondary school; and (c) all students shall have a good learning environment characterised by peace and order (*author's translation, Annual Municipal Report A*, 2016).

To ensure the defined learning outcomes, the overarching strategies direct attention to a range of measures, such as emphasising basic skills and early intervention, the use of standardised materials and tools in all core areas, the recruitment and qualification of leaders and teachers in strategically prioritised areas, competency development and the analysis and follow up of student results. Furthermore, the importance of systematic documentation, analysis and return of results to secure information on the levels of skills and subject development are highlighted as the foundation for student follow up. Especially, the importance of the compulsory half-year student assessment and the use of diagnostic materials in reading and numeracy are emphasised.

During the interview, the administrator described her micro–learning outcomes as those of following up on the schools' work with individual students' learning outcomes, making sure the schools have the competence to analyse and understand results and identifying the measures that affect these results. She described her work by saying, 'My assignment is to follow up on schools in relation to the assignment that we have – the learning outcomes of every single student'; she considered it especially important to

check out the analytical competence of schools in terms of – do I [the school leader/teacher] know how to analyse results, what do they [the results] mean for the choice of activities and to measure the effects to evaluate and adjust continuously – their analytical competence is what I have most focussed on.

She was also curious about how the school leaders led their teachers' learning processes. Thus, to become familiar with their work, she asked them for information about how they lead: 'I have asked about how they lead their teachers and how they lead by results, I have asked how they know that their students learn'. In relation to this, she also pointed out that, in general, she thought that the past few years had been marked by asking too many 'what' questions, while she was more interested in 'how': 'How, that is – what do you lead on and how do you do it?'. She stated that, in meetings, she had emphasised and praised good practices; yet, she had also confronted and corrected the work that had been done.

The District A administrator described meetings with the school leaders and a selection of teachers (selected based on being teachers responsible for the grade levels that had been subject to national testing that year) in which they discussed their analyses of results from the national tests related to their teaching practices and the individual challenges schools faced in reading, numeracy and English. She underscored the importance of including teachers in these meetings, partly because she needed to know what measures they would be introducing, along with their resources, competences and activities, so that she could help them evaluate their practices in relation to the results and the measures chosen. She did this because 'I want to know how – and then the teachers will be allowed to talk to me about that and probably also feel a little proud'. She considered that her previous position

as a school leader, coupled with her deep interest in practice, made it easy for her to be direct and concrete. She also rated herself as a good discussion partner.

The interview data demonstrated how this administrator prioritised influencing her school leaders to work with students' learning outcomes through the available data and data analyses in accordance with the strategies emphasised in the key policy documents. She focussed on measures and their effects and the importance of teachers' analytical competence; for example, she asked questions about results, teachers' analyses of the results, their interpretations of the results and the measures they wanted to employ. She did this by asking how to proceed based on the results, the choice of measures and the measures' effects. The data also revealed the motivation behind her attempts to influence what she considered important in leadership, such as asking 'what' and 'how' questions, demanding analyses and checking out competences or effects. This can be interpreted as her way of combining the macro-focus of student learning outcomes and analytical competence with micro-decisions related to her self-conception and personal standards of living up to the assignment to maintain her valued assets and ideas about relationship management.

The observation data from the national test results meeting showed an active, engaged administrator instructing school leaders. The administrator initiated the meeting, which was one of several school visits she had with school leaders and select groups of teachers. The meeting's tone was mostly firm but polite. Some disagreement caused tensions to rise, especially during discussions of what teachers do or do not do, and the school leaders defended the teachers' practices. These tensions remain unresolved at the end of the meeting.

The administrator opened the meeting by referring to their last meeting and recalling how the school leaders and teachers had been talking a lot about what they would do, but not how they would do it. In the subsequent discussion, she repeatedly asked the school leaders how they followed up on the teachers' work: 'You are out there every day. What do you observe, how focussed are you, how clear are your messages and what agreements do you make?' She also engaged in discussions on different teaching styles and how the school leaders evaluated and advised their teachers on how to teach. In general, her persistent style throughout the meeting illustrated her enactment of influence attempts, characterised by making inquiries about what school leaders and teachers do and why and how these actions are related to national test data. Her influence attempts in the observed meeting seemed to involve identifying, correcting and making inquiries into how the school leaders and teachers worked to improve outcomes and engage in direct, firm and confrontational discussions about teachers' individual approaches to teaching and learning.

# District B: Broad Student Learning Outcomes, School Development and Supporting School Leaders

In District B's document material, the macro–policy goals emphasised students' basic skills<sup>2</sup>, mastery, motivation and systematic assessment based on national policy objectives and the overall status of education in the district as measured by tests, surveys and evaluations. The strategies described and criteria to follow up on students' results frame the work within a setting in which learning is characterised as a long-term project and respect for the individual student and teacher are paramount.

District B's overall goal is to have 'a school that is oriented towards the future with a focus on the opportunities of the individual student to develop their skills to master the society and working life of tomorrow'. This is followed by a description of student, teacher and parental values that reflect 'the picture of how we want our school in X (District B) to be'. The district material also underscores that the values of respect, inclusion and responsibility are binding for all. Based on a total review and analysis of the results of the

<sup>&</sup>lt;sup>2</sup> With the last national education reform, the Knowledge Promotion Reform of 2006, five basic skills were introduced in the national curriculum to enhance schools' focus on reading, writing, numeracy, English language and digital skills.

district, such as status reports, the national student survey, national tests and national exams, the district has identified three focal points for improvement and development, as follows:

- Goal 1: 'Students' competence in basic skills will show through improvement in learning and motivation'.
- Goal 2: 'All students see themselves as appreciated and included in a way that emphasises learning, mastery and motivation and they experience teachers that lead the learning activities with order, respect and engagement';
- Goal 3: 'Through systematic assessment we create a foundation for learning, growth and development for the individual student' (*Strategic Municipal Report*, 2017; District B).

The overall aim of the district's efforts is to develop a culture of assessment that has learning as a goal. This occurs through increased competence and understanding of assessment as a learning tool. The criteria for achieving this goal include that all students know what to learn and what is expected of them; all students receive feedback that informs them about the quality of their work; all teachers regularly and actively evaluate their contributions to student learning; school leaders systematically use the results of diagnostic tests, national tests, half-term and final term grades and the national students' subjects and social learning in relation to these goals, so that they can actively help their children. The three goals and criteria form part of the district's quality assessment system, and schools are expected to report on all the criteria in their annual self-evaluation report using a scale of 1–5. Schools mainly use the self-evaluation report for reflective purposes, but it can also provide useful information for the district status report.

In the interview, the district administrator described his micro-goals as school development and developmental work, building competence and student learning outcomes:

'The most important part of my job is to follow up on schools, the school leaders and the group of leaders at the schools'. He described how he changed routine meetings when he took over the position by dividing them according to general administrative and developmental work. Consequently, at the time of the interview, he had a monthly meeting with school leaders focussing on competency building and school development, a change he considered important for how they work with school development. As the district administrator commented, 'It has been important for how we are now more focussed on our development work and that it is not only a part of something else'. He also considered this to have been a positive shift, as it now included all school leaders. This had led to a more collective development than if he had held these meetings with the school leaders alone: 'It is much more ownership over what we are doing; it is a common thing'. His main ambition for his work, in combination with the development of an overall strategy for the district's school development, was that it would determine the direction the district would take over the next 10-15 years. As the administrator commented, 'It will say something about the course, so that we can be in the driver's seat for what we want to develop and not be such a kangaroo jumping back and forth that we might have been for several years'.

The district administrator has monthly conversations with school leaders when he visits the schools. The meetings have a regular structure, and among the different elements on the agenda, they always discuss students' learning outcomes. The administrator explained that this does not limit the focus to results; rather, it helps them all to 'focus on how school leaders follow up on what happens in classrooms, or know what happens in the classroom'. He stated that they do not have systematic routines, such as the use of standardised forms, and they do not always talk about the national test results or national surveys. However, he always keeps a focus on learning outcomes, so school leaders know he will always ask about outcomes and what they are doing about them. He also described how, although the national

test results are used as points of reference in municipal annual reports, he does not place great emphasis on these results in his conversations with school leaders: 'When I talk to school leaders or in meetings[,] the picture is broader and the level of detail larger'. Furthermore, he described how they focussed on what to do and how to continue working for the improvement of students' learning outcomes:

That is what guides our work, what happens in the classroom. It is more important for us and the teachers to identify the ones that we know need a boost than that we score 4.6 on a municipal report; it is nothing more than a number.

He also pointed out that, while the numbers are sufficient indicators of development over time, they also use the data in discussions about what kinds of competences teachers have and how the school leaders can support the teachers and focus on what happens in teaching. It is important for him that the school leaders feel supported, that is, 'that they know that they are followed up on, that we care and that they are not alone'.

The interview data revealed how the administrator has prioritised influencing his school leaders through a focus on school development and student learning outcomes via frequent meetings and highlighting student learning outcomes in meetings and conversations with school leaders. He considered it important to focus on the bigger picture more than individual test results, as well as to discuss how to move forward by focussing on classroom activities, teacher competence in subjects and identifying students in need of support. His attempts at influence prioritised dialogue and follow up to make school leaders feel supported and cared for. This can be interpreted as his way of combining the macro–policy goals of school development and student learning outcomes with the micro-forces and decisions related to self-conception and personal standards of unity and dialogue with school leaders. It is also his way of maintaining valued assets and ideas about relationship management by

providing focus, direction and support in the school leaders' work with school development efforts.

The observation data from the results meeting this administrator had with his school leaders depict a meeting with a relaxed atmosphere, demonstrating mostly shared understanding and little tension. Although the participants agreed in most cases, they displayed an investigative attitude toward the meeting's theme. The administrator initiated the meeting, which focussed on the latest results from the national tests in English, reading and maths. He presented the overall results of the schools in the district, highlighted the positive points and areas where challenges remained and then opened the floor to discussion about what could explain the results and what they could do about them:

They [the data] clearly show that we have to work with math. The scores are far below the average for the county and nationally. But we must also work with English and reading. It is important that we have this discussion about how we work with this.

During the rest of the meeting, the school leaders discussed various interpretations of and explanations for the results. Several issues were brought up in the discussion, and most of them were resolved or decided on by the group. The meeting ended with the administrator's conclusion:

I can hear that you are working systematically with this, 'What shall we do to improve our students?'. The system around the national tests and our opportunities to follow up on the results have become much better; it must be done over time and there is also a question about how many tests there should be... Good!

The meeting exemplified an administrator who hands over the results in descriptive terms and who, to a large degree, leaves the closer analysis and explanations to his group of school leaders to determine as a collective. This is a decision that seems to engage them actively in their common challenges. The meeting focussed more on interpreting results than directing where to go next. The administrator's enacted influencing attempt in this meeting can be interpreted as facilitating an area for discussion more than confronting the school leaders about how to work with the identified challenges. This could relate to his microforces of involving school leaders, common ownership and more general aspects of school development processes.

#### Discussion

This article uses the following research questions as its points of departure:

- How do district administrators give meaning to predefined policy goals in local policy documents?
- 2) What characterises their choice of actions directed toward school leaders' data use?
- 3) What are the implications for the identified adaptations and enactments made by district administrators when compared with local policy ideals and plans for data use in education?

Through the analysis, we have identified how the macro-messages communicated in key district documents broadly resemble policy goals in their focus on strengthening student learning outcomes and securing a safe, sound learning environment. They also vary in elements we have highlighted, such as documentation and analyses of results or making students feel appreciated and motivated.

## Differences in Approaches to Learning Outcomes and Data Use

We have identified differing approaches to learning outcomes and data use in the district administrators' micro-meaning-making efforts and attempts to influence the use of data in meetings with school leaders. This variation partly seems to reflect district-specific characteristics, policies and strategies in terms of the sophistication of quality development systems. It also seems to reflect administrators' individual negotiations between what we describe as the macro– and micro–learning outcomes and their understandings of data use, in

terms of how the district administrators work to facilitate areas for school development based on the use of data. Our findings shed light on how administrators transform and adapt the macro–policy goals defined by the policy documents to suit their micro-meaning-making processes when determining what they consider 'reasonable' ways of working with their school leaders. Thus, the analysis shows how professional ties, in terms of knowledge and values, become important for working with data. In short, the study highlights how different perspectives on the purposes of working with policy goals lead to what we describe as different and personal governing styles in practice.

## **Administrators' Personal Governing Styles**

The administrators' individual choices concerning what types of meetings to hold, how these are structured and the interactions within them seem to reflect various but also specific styles of governing using student data. The positioning and perceived importance of data in governing efforts varied between the two administrators. Administrator A continuously referred to data and the importance of ensuring that the individual school leaders and teachers knew their students' performance data, how to analyse them and then how to act on these in practice. She also stressed the need to follow up on the effects of the measures taken. Her governing style was perceived as making sure that this happened in the individual schools. In contrast, with the primary goal of developing school and classroom practices in a supportive environment, Administrator B's approach can be described as a combined one. In his governing style, he focussed on the development of a common ownership of the processes and the work of each school among the school leaders. In his meetings, data were not so important; rather, they served only as a useful indicator of development over time. This administrator has chosen a subtler focus on learning outcomes by ensuring that school leaders keep an eye on the development of students in classrooms. The two approaches confirm the findings of earlier studies, which have shown that variations in approaches to data use in schools depend on the characteristics of the local policy for data use (Kerr et al., 2006; Miller, 2010).

While one administrator focussed almost solely on the students and having strong coherency between the macro- and micro-levels (Parke, 2012), the other placed a stronger emphasis on relationships with school leaders and teachers; the latter seemed to lead to a more indirect coherency between the micro- and macro-levels. That is, the micro-forces of Administrator B seemed to mark his influence attempts by highlighting collegiality and supportive relationships as crucial for enhancing student performance, while the influence attempts of Administrator A can be characterised as more direct and confrontational, placing less emphasis on a friendly relationship with the school leaders and more on fulfilling the 'assignment' of improving students' learning outcomes.

### **Decentralisation Creates Space for Different Governing Styles**

The national and local policy expectations of the district administrators, that is, the enhancement of learning outcomes in a decentralised education system, have created a space that enables administrators to develop different governing styles. The governing styles explicate administrators' adoption of routines and strategies in accordance with local quality assessment systems, key policy documents and personal preferences. This implies that what motivates school leaders and drives developmental processes differs based on what types of facilitation and facilitator roles are available to govern data-use processes. For example, Administrator A's facilitation is characterised by asking, reporting, documenting, checking and measuring effects; this indicates a stronger emphasis on control and a more narrow and closed understanding of learning outcomes. Her attempts to influence the use of data are exerted by constantly stressing the issue in an explicit and direct manner. Such an approach can be interpreted as coercive, and according to the literature, this may lead to weakening the development of a productive organisational culture for data use (see Coburn & Turner, 2011;

Young, 2006; Young & Kim, 2010). Administrator B's facilitation is characterised by a broader understanding of learning outcomes, presenting results for discussion and emphasising the common and collective ownership of results and measures through dialogue. This indicates a more open, broader, developmental approach. Thus, the different perspectives on learning outcomes in data-use processes seem to open or close various types of language about practice, choices on influencing attempts and governing styles. The figure 1 below illustrates examples in two of the quadrants in this study.

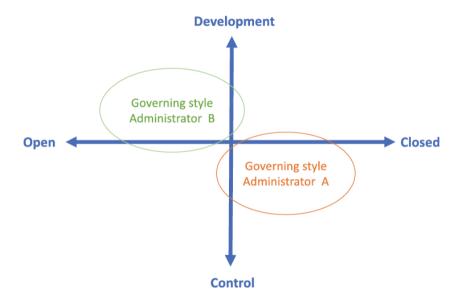


Figure 1. Governing styles of district administrators in data use processes.

#### Conclusion

As district administrators have been made increasingly accountable for student performance, they have also become responsible for influencing school leaders to initiate development work in schools and changes in education. This implies that, in many ways, they are compelled to make strategic choices when interpreting local policy and attempting to influence school leaders. District administrators purposefully engage in and shape their institutions in distinct ways; this leads to differences that have only been focussed on to a limited extent in previous research. Our study does not provide the grounds for conclusions about what governing style may be the most productive for the development of an organisational culture that fosters data use to reach defined learning outcomes. However, the two approaches presented herein can be considered as a theorisation of two opposite governing styles that can be investigated further, with regard to outcomes, in empirical work. Still, the outcomes discussed here should not only be considered in terms of student performance but also in terms of student and teacher motivation. That is, an important aspect of discussing different governing styles and the effects that these may produce is also related to how one finds the optimal balance between governing and professional autonomy. This is perhaps especially true in contexts where school leaders and teachers have enjoyed quite high degrees of autonomy in their work.

With the above in mind, this study has clearly identified processes that should be investigated further in additional research on data use in education. Another implication of this study may be the importance of balancing the fine line between districts' governing of school development and administrators' governing styles with professional autonomy when focussing on goals and data use.

Finally, the integration of a wide range of factors influencing how data use is enacted in district administration sheds light on the complexity of local policy, local governing and the work in and around schools. The different governing styles of the administrators in this study revealed many facets of their work on student performance data. Especially, we note how administrators in districts with different quality assessment systems approach data and data use in education differently, which again calls for greater consideration and awareness of the role of local quality systems, processes and actions taken. This study's analysis makes a case for more richly detailed, cross-level studies to better understand administrators' practical actions and their consequences.

#### References

- Aasen, P., Møller, J., Rye, E. M., Prøitz, T. S., & Hertzberg, F. (2012). Kunnskapsløftet som styringsreform et løft eller et løfte? Forvaltningsnivåenes og institusjonenes rolle i implementeringen av reformen. [The Knowledge Promotion Reform The role of the institutions in reform implementation]. Oslo: Nordic Institute for Studies in Innovation, Research and Education.
- Allan, J. (1996). Learning outcomes in higher education. *Studies in Higher Education*, *21*(1), 93–108.
- Altrichter, H., & Merki, K. M. (2010). Handbuch Neue Steuerung im Schulsystem. [Handbook on the new governing of the education system]. VS Verlag für Sozialwissenschaften.
- Avidov-Ungar, O., & Reingold, R. (2018). Israeli Ministry of Education's district managers' and superintendents' role as educational leaders – Implementing the new policy for teachers' professional development. *International Journal of Leadership in Education*, 21(3), 293–309.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, *9*(2), 27–40.
- Coburn, C., & Turner, E. O. (2011). Research on data use: A framework and analysis. *Measurement: Interdisciplinary Research and Practice*, 9(4), 173–206.
- Daly, A. J., Finnigan, K. S., Jordan, S., Moolenaar, N. M., & Che, J. (2014). Misalignment and perverse incentives: Examining the politics of district leaders as brokers in the use of research evidence. *Educational Policy*, 28(2), 145–174.
- Datnow, A., Park, V., & Kennedy-Lewis, B. (2012). High school teachers' use of data to inform instruction. *Journal of Education for Students Placed at Risk*, *17*(4), 247–265.

Dillard, J. P., Segrin, C., & Harden, J. M. (1989). Primary and secondary goals in the

production of interpersonal influence messages. *Communications Monographs*, 56(1), 19–38.

- Eisner, E. W. (2005). *Reimagining schools: The selected works of Elliot W. Eisner*. London, UK: Routledge.
- Farrell, C. C., & Coburn, C. E. (2017). Absorptive capacity: A conceptual framework for understanding district central office learning. *Journal of Educational Change*, 18(2), 135–159.
- Feng, H., & Wilson, S. R. (2004). A critical review of the primary/secondary goal framework. Paper presented at the meeting of the International Communication Association, New Orleans, LA.
- Hallett, T. (2010). The myth incarnate: Recoupling processes, turmoil, and inhabited institutions in an urban elementary school. *American Sociological Review*, 75(1), 52–74.
- Hargreaves, A., & Moore, S. (2000). Educational outcomes, modern and postmodern interpretations: Response to Smyth and Dow. *British Journal of Sociology of Education*, 21(1), 27–42.
- Havnes, A., & Prøitz, T. S. (2016). Why use learning outcomes in higher education?
  Exploring the grounds for academic resistance and reclaiming the value of unexpected learning. *Educational Assessment, Evaluation and Accountability*, 28(3), 205–223.
- Henig, J. R. (2012). The politics of data use. Teachers College Record, 114(11), 1-32.
- Hopmann, S. T. (2008). No child, no school, no state left behind: Schooling in the age of accountability. *Journal of Curriculum Studies*, *40*(4), 417–456.
- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47(1), 181–217.

- James, M., & Brown, S. (2005). Grasping the TLRP nettle: Preliminary analysis and some enduring issues surrounding the improvement of learning outcomes. *Curriculum Journal*, 16(1), 7–30.
- Jennings, J. L. (2012). The effects of accountability system design on teachers' use of test score data. *Teachers College Record*, *114*(11), 1–23.
- Kelly, A., & Downey, C. (2012). Professional attitudes to the use of pupil performance data in English secondary schools. *School Effectiveness and School Improvement*, 22(4), 415–437.
- Kennedy, D. (2006). *Writing and using learning outcomes: A practical guide*. Cork, Ireland: University College Cork.
- Kerr, K. A., Marsh, J. A., Ikemoto, G. S., Darilek, H., & Barney, H. (2006). Strategies to promote data use for instructional improvement: Actions, outcomes, and lessons from three urban districts. *American Journal of Education*, 112(4), 496–520.
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research*. CA: SAGE, 230-243.
- Lassnigg, L. (2012). 'Lost in translation': Learning outcomes and the governance of education. *Journal of Education and Work*, *25*(3), 299–330.
- Lawn, M. (2011). Standardizing the European education policy space. *European Educational Research Journal*, *10*(2), 259–272.
- Little, J. W. (2012). Understanding data use practices among teachers: The contribution of micro-process studies. *American Journal of Education*, *118*(2), 143–166.
- Lundgren, U. P. (2006). Political governing and curriculum change From active to reactive curriculum reforms: The need for a reorientation of curriculum theory. *Studies in Educational Policy and Educational Philosophy*, *1*, 26853.
   doi:abs/10.1080/16522729.2006.11803914

- Miller, C. L. (2010). Accountability policy implementation and the case of smaller school district capacity: Three contrasting cases that examine the flow and use of NCLB accountability data. *Leadership and Policy in Schools*, 9(4), 384–420.
- Møller, J., & Skedsmo, G. (2013). Modernizing education NPM reform in the Norwegian education system. *Journal of Education Administration and History*, *45*(4), 336–355.
- Ozga, J. (2009). Governing education through data in England: From regulation to selfevaluation. *Journal of Education Policy*, *24*(2), 149–162.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544.
- Park, V., Daly, A., & Guerra, A. W. (2012). Strategic framing: How leaders craft the meaning of data use for equity and learning. *Educational Policy*, 27(4), 645–675.
- Parke, C. (2012). Making use of district and school data. *Practical Assessment*, *Research and Evaluation*, 17(10), 1–15.
- Prøitz, T. S. (2010). Learning outcomes: What are they? Who defines them? When and where are they defined? *Educational Assessment*, *Evaluation and Accountability*, 22(2), 119–137.
- Prøitz, T. S. (2014). Conceptualisations of learning outcomes An explorative study of policymakers, teachers and scholars (Doctoral dissertation, University of Oslo, Oslo, Norway). Series of dissertations, Faculty of Educational Sciences, 194. https://brage.bibsys.no/xmlui/handle/11250/278896
- Prøitz, T. S., Mausethagen, S., & Skedsmo, G. (2017). Investigative modes in research on data use in education, *Nordic Journal of Studies in Educational Policy*, 3(1), 42–55. doi:10.1080/20020317.2017.1326280

- Racherbäumer, K., Funke, C., van Ackeren, I., & Clausen, M. (2013). Datennutzung und Schulleitungshandeln an Schulen in weniger begünstigter Lage. Empirische Befunde zu ausgewählten Aspekten der Qualitätsentwicklung [Use of data and school administration in schools in less favoured locations]. *Die Deutsche Schule*, *13*(12), 226–254.
- Rorrer, A. K., Skrla, L., & Scheurich, J. J. (2008). Districts as institutional actors in educational reform. *Educational Administration Quarterly*, 44(3), 307–357.
- Schildkamp, K., Karbautzki, L., & Vanhoof, J. (2014). Exploring data use practices around
  Europe: Identifying enablers and barriers. *Studies in Educational Evaluation*, 42, 15–24.
- Schrader, D. C., & Dillard, J. P. (1998). Goal structures and interpersonal influence. *Communication Studies*, *49*(4), 276–293.
- Skedsmo, G. (2009). *School governing in transition? Perspectives, purposes and perceptions of evaluation policy* (Doctoral thesis, University of Oslo, Oslo, Norway).
- Skedsmo, G. & Møller, J. (2016). Governing by new performance expectations in Norwegian schools. In H. Gunter, D. Hall, R. Serpieri, & E. Grimaldi (Eds.), *New public management and the reform of education: European lessons for policy and practice* (pp. 53–65). London, UK: Routledge.
- Spillane, J. P. (2012). Data in practice: Conceptualizing the data-based decision-making phenomena. *American Journal of Education*, *118*(2), 113–141.
- Spillane, J. P., Hunt, B., & Healey, K. (2009). Managing and leading elementary schools: Attending to the formal and informal organisation. *International Studies in Educational Administration*, 37(1), 5–28.

Steffensen, K., Ekren, R., Zachrisen, O. O., & Kirkebøen, L. J. (2017). Er det forskjeller i

skolers og kommuners bidrag til elevenes læring i grunnskolen? En kvantitativ studie.[Is it differences in value added by schools and municipalities? A quantitative study].Statistics Norway Report 2017/2. Oslo, Norway: Statistics Norway.

- Tranvik, T., & Selle, P. (2005). State and citizens in Norway: Organisational society and state–municipal relations. *Western European Politics*, *28*(4), 852–871.
- Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal*, 44(3), 519–558.
- Wayman, J. C., Jimerson, J. B., & Cho, V. (2012). Organizational considerations in establishing the data-informed district. *School Effectiveness and School Improvement*, 23(2), 159–178.
- Young, V. M. (2006). Teachers' use of data: Loose coupling, agenda setting, and team norms. *American Journal of Education*, *112*(4), 521–548.
- Young, V. M., & Kim, D. H. (2010). Using assessments for instructional improvement: A literature review. *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas*, 18(19), 1. Retrieved from http://epaa.asu.edu/ojs/article/view/809